

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-12 (Canceled).

Claim 13 (New): A method of regeneration of a motor vehicle particle filter, in which means for regeneration of the filter are used as soon as a load value of the filter exceeds a predetermined threshold, comprising:

making a calculation of a parameter representing operating conditions of the means for regeneration; and

controlling operation of the means for regeneration in accordance with a value of the parameter.

Claim 14 (New): A method of regeneration according to Claim 13, wherein the parameter is calculated continuously while the vehicle is running.

Claim 15 (New): A method of regeneration according to Claim 13, wherein the making a calculation of the parameter is made during use of the means for regeneration.

Claim 16 (New): A method of regeneration according to Claim 13, wherein the parameter representing operating conditions of the means for regeneration includes a ratio between flow of exhaust gases emanating from an engine of the vehicle and mass of soot burned during use of the means for regeneration over a predetermined period of time.

Claim 17 (New): A method of regeneration according to Claim 13, wherein the parameter representing operating conditions of the means for regeneration includes a ratio between instantaneous flow of exhaust gases and rate of combustion of soot.

Claim 18 (New): A method of regeneration according to Claim 13, wherein the controlling operation of the means for regeneration is controlled by a comparison between the value of the parameter and at least one threshold value stored in memory.

Claim 19 (New): A method of regeneration according to Claim 16, wherein the flow of exhaust gases is extracted from a map stored in memory in a central computer managing operation of the engine of the vehicle.

Claim 20 (New): A method of regeneration according to Claim 19, wherein the mass of soot burned is extracted from the map stored in memory in the central computer.

Claim 21 (New): A method of regeneration according to Claim 16, wherein the mass of soot burned is determined from the mass of soot previously burned and a rate of regeneration of the filter.

Claim 22 (New): A method of regeneration according to Claim 21, wherein the rate of regeneration of the filter is extracted from a map stored in memory in a central computer managing operation of the engine of the vehicle, depending on internal temperature of the particle filter.

Claim 23 (New): A method of regeneration according to Claim 23, wherein the internal temperature $T_{f\alpha p}$ of the particle filter is calculated from equation:

$$T_{f\alpha p} = \alpha T_e + (1 - \alpha) \times T_s,$$

in which

T_e designates inlet temperature of the particle filter;

T_s designates outlet temperature of the particle filter; and

α designates a coefficient worked out as a function of the difference between the inlet temperature T_e and the outlet temperature T_s , based on a mapped function in the central computer.

Claim 24 (New): A system of control of regeneration of a motor vehicle particle filter, comprising:

means for controlling a load level of the particle filter, to produce use of means for regeneration of the filter;

means for calculation of a parameter representing operating conditions of the means for regeneration to control operation of the means for regeneration as a function of a value of the parameter.